# APPATENT COOPERATION TREAT TEL **PCT**

REC'D 2 6 SEP 2000

INTERNATIONAL PRELIMINARY EXAMINATION EXPORT

PCT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference FP10625	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)			
International application No.	International filing da	date (day month year) Priority Date (day month year)			
PCT/AU99/00056	28 January 1999	28 January 1999			
International Patent Classification (IPC	) or national classificati	on and IPC			
Int. Cl. H04B 10/12, G02B 6/10					
Applicant THE UNIVERSITY OF M	ELBOURNE et al				
This international preliminar     Authority and is transmitted to			International Preliminary Examining		
2. This REPORT consists of a to					
This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).					
These annexes consist of a tot	al of sheet(s).				
3. This report contains indications related	ting to the following iter	ms:			
I X Basis of the repo	rt				
II Priority					
III Non-establishme					
IV Lack of unity of	IV Lack of unity of invention				
V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement					
VI Certain documents cited					
VII Certain defects in the international application					
VIII Certain observations on the international application					
Date of submission of the demand 18 August 2000		Date of completion of the report 29 August 2000			
Name and mailing address of the IPEA A!		Authorized Officer			
AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUST E-mail address pet à ipaustralia gov au	TRALIA	J. LAW			
Facsimile No. (02) 6285-3929		Telephone No. (02) 6283 2179			

V.	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
	citations and explanations supporting such statement

	Citations and Capitaliations supporting such statement			
1	Statement			
	Novelty (N)	Claims 1-16	YES	
		Claims	NO	
	Inventive step (IS)	Claims 1-16	YES	
		Claims	NO	
	Industrial applicability (IA)	Claims 1-16	YES	
		Claims	NO	

2. Citations and explanations (Rule 70.7)

#### Claims 1-16

The invention of the claims is a method of reducing the feedback effects of Rayleigh backscattering in an optical waveguide lasing system whereby portions of the optical waveguide are subjected to low frequency mechanical vibration.

No citation or combination of citations disclose the subjecting of portions of an optical waveguide to low frequency mechanical vibration so as to reduce the feedback effects of Rayleigh backscattering in the waveguide.

The closest art of:

#### WO 98/27406 A

is directed to a technique of distributed measurement of strain/temperature in an optical waveguide based on the property that the wavelength of backscattered light is dependent upon the strain/temperature of the waveguide at the point at which the light was scattered.

#### TENT COOPERATION TRE, Y

	From the iNTERNATIONAL BUREAU		
PCT	·		
NOTIFICATION OF ELECTION (PCT Rule 61.2)	Assistant Commissioner for Patents United States Patent and Trademark Office		
	Box PCT Washington, D.C.20231 ETATS-UNIS D AMERIQUE		
Date of mailing (day month year) 18 September 2000 (18.09.00)	n its capacity as elected Office		
International application No. PCT AU99 00056	Applicant's or agent's file reference FP10625		
International filing date (day month year) 28 January 1999 (28.01.99)	Priority date (da, month year)		
Applicant			
GAN, Hongbing et al			
The designated Office is hereby notified of its election mad  in the demand filed with the International Preliminar  18 August 200	y Examining Authority on:		
in a notice effecting later election filed with the Inter	national Bureau on:		
2. The election X was was not was not made before the expiration of 19 months from the priorit; Rule 32.2(b).	date or, where Bule 32 applies, within the time i mit under		

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

Charlotte ENGER

Telephone No. 41/22 338 H2 58

## INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU 99/00056

A.	CLASSIFICATION OF SUBJECT MATTER					
Int Cl <sup>6</sup> :	H04B 10/12 G02B 6/10					
According to	International Patent Classification (IPC) or to both	national classification and IPC				
В.	FIELDS SEARCHED					
Minimum doci	umentation searched (classification system followed by	classification symbols)				
IPC: H04B	G02F, G02B, H01S					
Documentation	n searched other than minimum documentation to the ex	tent that such documents are included in the	ne fields searched			
Electronic data	a base consulted during the international search (name of	data base and, where practicable, search t	erms used)			
C.	DOCUMENTS CONSIDERED TO BE RELEVAN	r				
Category*	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.			
A	WO 98/27406 (KINGS COLLEGE LONDON) 25 June 1998		1-16			
A	US 5457532 (AUGUST et al.) whole document		1-16			
	Further documents are listed in the continuation of Box C	X See patent family a	nnex			
* Special categories of cited documents:  "A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier application or patent but published on or after the international filing date  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means  "P" document defining the general state of the art which is not considered to be of particular relevance; the claimed invention can be considered novel or cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention can be considered to involve an inventive step when the document of particular relevance; the claimed invention can be considered to involve an inventive step when the document of particular relevance; the claimed invention can be considered to involve an inventive step when the document of particular relevance; the claimed invention can be considered to involve an inventive step when the document of particular relevance; the claimed invention can be considered to involve an inventive step when the document of particular relevance; the claimed invention can be considered to involve an inventive step when the document of particular relevance; the claimed invention can be considered to involve an inventive step when the document of particular relevance; the claimed invention can be considered to involve an inventive step when the document of particular relevance; the claimed invention can be considered to involve an inventive step when the document of particular relevance; the claimed invention can be considered to involve an inventive step when the document of particular relevance; the claimed invention can be considered to involve an inventive step when the document of particular relevance; the claimed invention can be considered to involve an inventive step when the do						
Date of the ac	ctual completion of the international search	Date of mailing of the international sear 2 3 FEB 1999	ch report			
AUSTRALIA PO BOX 200 WODEN AC AUSTRALIA	CT 2606	Authorized officer  J. LAW Telephone No.: (02) 6283 2179				

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No. PCT/AU 99/00056

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

atent Doo	cument Cited in Search Report			Pat	ent Family Member		
WO	9827406	GB	9626099				
US	5457532	EP	763188	JР	10501338	WO	9533183
		US	5559908			<del></del>	
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	•						
							END OF AN



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Team: OIPEScanning Dossier: 09890307

Legal Date: 08-31-2001

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1	M905	11

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